

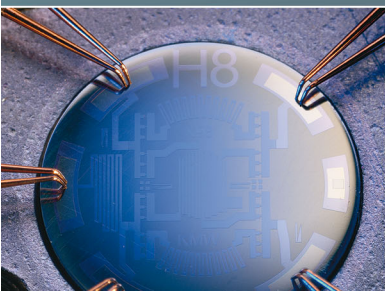
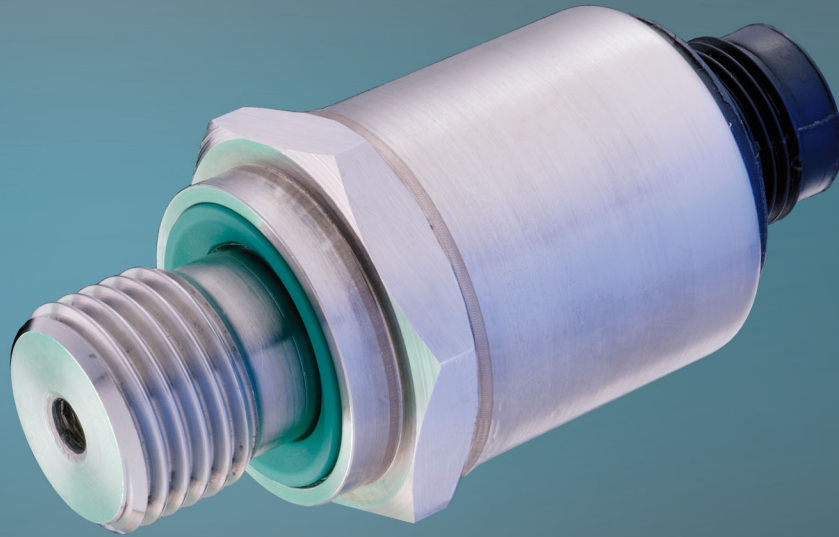
Pioneering new technologies
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Sensor-Technik Wiedemann GmbH
Mobile Controllers and Measurement Technologies

Pressure transmitter M01

Pressure transmitter M01



Pressure transmitter M01

The M01 is especially designed to be used in off-highway vehicles. The EMC, shock and vibration protection is designed for these machines and the rough environment they operate in.

The M01 is available for use in pressure ranges from 0 to 25 bar up to 0 to 800 bar. Within the compensated temperature range the accuracy is 1% overall. The M01 can be used with a medium temperature of up to 150°C (302°F) and the maximum permissible ambient temperature is 125°C (257°F). All wetted parts are of stainless steel (1.4548). In combination with the welded thin-film measuring element, the transmitter has a high media compatibility. An optional damping element can be integrated into the medium access. The housing is also constructed of stainless steel (1.4301).

The M01 is manufactured according to ISO/TS 16949 and is licensed in accordance with e1. The good cost/performance ratio makes this pressure transmitter ideal for series production in off-highway vehicles and for industrial use. OEM versions are also available.

Technical specifications

Pressure range, gauge	0 - 25 bar to 0 - 800 bar, other ranges available free of charge					
Standard pressure range	bar	50	100	250	400	800
Overload	bar	100	200	500	800	1000
Linearity, pressure hysteresis and repeatability	% FS	< 0.5				
Overall accuracy	% FS	< = 1.0 (0 to 80°C / 0 to 176°F) < = 1.5 (-25 to 100°C / -13 to 212°F) < = 2.5 (-40 to 125°C / -40 to 257°F)				
Long-run stability	% FS p.a.	< 0.2				
Media temperature	-40 to 150 °C (-40 to 302°F)					
Operating temperature	-40 to 125 °C (-40 to 257°F)					
Storage temperature	-40 to 125 °C (-40 to 257°F)					
Voltage supply	9 - 36 V DC 14 - 36 V DC (0 - 10 V voltage output) allowable ripple @ 50 Hz: 10% 5 V DC (ratiometric output)					
Output signal	4 - 20 mA (2-wire-technique), 0/4-20 mA (3-wire-technique), 0 - 10 V, 0.5 - 4.5 V (ratiometric at 5V), short circuit protected					
Electrical connection	M12 connector, DIN-Bajonett (DIN 72585); AMP-SuperSeal 1,5; Cable output more connectors on request					
Pressure connection	G 1/4, 1/4 NPT, G1/4 with manometer, more pressure connectors on request					
Protection class	IP 65 optional IP 69k (depends on used electrical connection)					
Starting torque	up to 35 Nm					
EMC	EN 61000-6-2 EN 61000-6-3					
Shock	500g per IEC 60068-2-27 (Shock mechanical)					
Vibration	20g per IEC 60068-2-6 (Vibration at resonance)					
Material wetted parts	1.4548 / FKM					
Material housing	1.4301					
Material diaphragm	1.4548					

Pressure transmitter M01

Electrical connection Protection class IP (IEC 60 529)

CIRCULAR PLUG-IN CONNECTOR

M 12x1, 5-pole, IP 67

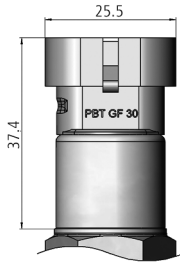
PIN assignment: Vcc = 1, Signal = 3 (2-wire-technique)
 Vcc = 1, GND = 3, Signal = 4 (3-wire-technique)
 please do not assign the other PINs!



CONNECTOR FOR AMP SUPERSEAL 1,5

3-pole, IP 67

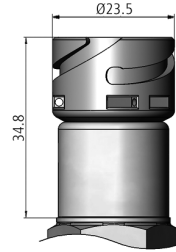
PIN assignment: Vcc = 3, Signal = 1 (2-wire-technique)
 Vcc = 3, GND = 1, Signal = 2 (3-wire-technique)
 please do not assign the other PINs!



BAYONET CONNECTOR

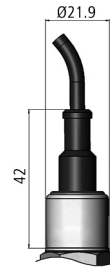
DIN 72 585, 4-pole, IP 69k

PIN assignment: Vcc = 1, Signal = 2 (2-wire-technique)
 Vcc = 1, GND = 2, Signal = 3 (3-wire-technique)
 please do not assign the other PINs!



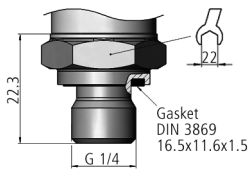
CABLE OUTPUT

IP 69k



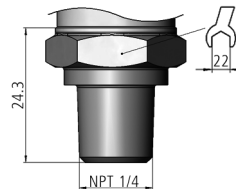
Pressure connection

G 1/4, DIN 3852 T 11 (Form E)



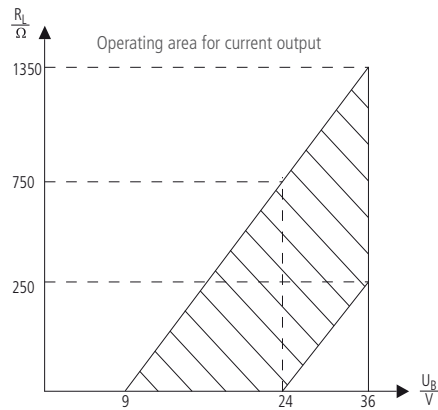
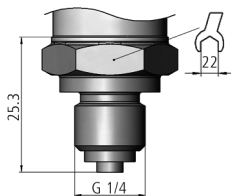
1/4 NPT

per „Nominal width for US-Standard bevelled pipe thread NPT“



G 1/4 with manometer

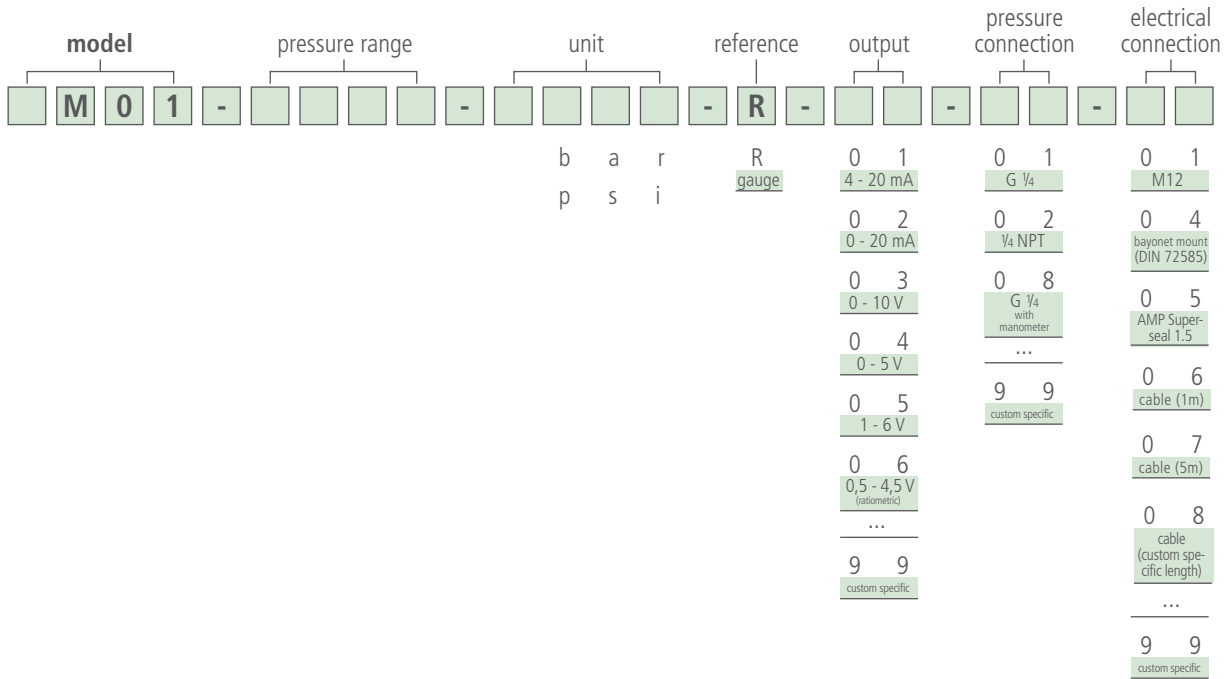
Manometer per EN837-1 (optional DIN 16288)



Current output: load $R_L = \frac{U_B - 9V}{0,02 A}$

Voltage output: load $R_L > 10k\Omega$

Order codes



Sensor-Technik Wiedemann GmbH
Steuer- und Regelelektronik
 Am Bärenwald 6
 87600 Kaufbeuren
 Germany
 Telephone +49 (0) 8341 9505-0
 Telefax +49 (0) 8341 9505-55
 E-Mail info@sensor-technik.de
 Internet www.sensor-technik.de

STW-Technic, LP
Mobile Controllers and
Measurement Technologies
 3000 Northwoods Parkway, Suite 260
 Norcross, GA 30071, USA
 Telephone +1 (770) 242-1002
 Telefax +1 (770) 242-1006
 E-Mail sales@stw-technic.com
 Internet www.stw-technic.com

Sensor-Technik UK Ltd.
 Unit 1, Stoke Mills
 Mill Road
 Sharnbrook, Bedfordshire
 MK44 1NN England
 Telephone +44 (0) 1234 7820-49
 Telefax +44 (0) 1234 7820-56
 E-Mail info@sensor-technik.co.uk
 Internet www.sensor-technik.co.uk